

# Export Wheat

## Wheat Grades and Grade Requirements

Wheat is divided into eight classes: Hard Red Spring wheat, Hard Red Winter wheat, Soft Red Winter wheat, Durum wheat, Hard White wheat, Soft White wheat, Unclassed wheat, and Mixed wheat. The classes Hard Red Spring wheat, Soft White wheat, and Durum wheat are further divided into subclasses. There are no subclasses in the classes Hard Red Winter wheat, Soft Red Winter wheat, Hard

White wheat, Unclassed wheat, and Mixed wheat. Each class and subclass is divided into five U.S. numerical grades and U.S. Sample grade. Special grades are provided to emphasize special qualities or conditions affecting the value of wheat. Special grades are added to and made a part of the grade designation. They do not affect the numerical or Sample grade designation.

## U.S. Standards for Wheat

Grade	Minimum limits of --		Maximum limits of --						
	Test weight per bushel		Damaged kernels		Foreign Material	Shrunken and broken kernels	Defects <sup>3</sup> (total)	Wheat of other classes <sup>4</sup>	
	Hard Red Spring wheat or White Club wheat <sup>1</sup> (pounds)	All other classes and subclasses (pounds)	Heat-damaged kernels (percent)	Total <sup>2</sup> (percent)				Contrasting classes (percent)	Total <sup>5</sup> (percent)
U.S. No. 1	58.0	60.0	0.2	2.0	0.4	3.0	3.0	1.0	3.0
U.S. No. 2	57.0	58.0	0.2	4.0	0.7	5.0	5.0	2.0	5.0
U.S. No. 3	55.0	56.0	0.5	7.0	1.3	8.0	8.0	3.0	10.0
U.S. No. 4	53.0	54.0	1.0	10.0	3.0	12.0	12.0	10.0	10.0
U.S. No. 5	50.0	51.0	3.0	15.0	5.0	20.0	20.0	10.0	10.0
U.S. Sample grade									

U.S. Sample grade is wheat that:

- (a) Does not meet the requirements for the grades U.S. Nos. 1, 2, 3, 4, or 5; or
- (b) Contains 32 or more insect-damaged kernels per 100 grams of wheat, or
- (c) Contains 4 or more stones or any number of stones which have an aggregate weight in excess of 0.1 percent of the sample weight, 1 or more pieces of glass, 3 or more crotalaria seeds (*Crotalaria spp.*), 2 or more castor beans (*Ricinus communis L.*), 4 or more particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), 2 or more rodent pellets, bird dropping, or an equivalent quantity of other animal filth, five or more pieces of animal filth, castor beans, crotalaria seeds, glass, stones, or unknown foreign substances, in combination, per 1,000 grams of wheat; or
- (d) Has a musty, sour, or commercially objectionable foreign odor (except smut or garlic odor); or
- (e) Is heating or otherwise of distinctly low quality.

<sup>1</sup>These requirements also apply when Hard Red Spring or White Club wheat predominates in a sample of Mixed wheat.

<sup>2</sup> Includes heat-damaged kernels.

<sup>3</sup>Defects include damaged kernels (total), foreign material, and shrunken and broken kernels. The sum of these three factors may not exceed the limit for defects for each numerical grade.

<sup>4</sup>Unclassed wheat of any grade may contain not more than 10.0 percent of wheat of other classes.

<sup>5</sup>Includes contrasting classes.

## **Wheat**

### **Definitions**

**Test weight (lb/bu)** is pounds of grain per Winchester bushel, determined by an approved device after the removal of dockage.

**Test weight (kg/hl)** is the metric system equivalent to pounds per bushel. Kilograms per hectoliter are calculated as follows:

For **Durum** wheat, multiply pounds per bushel by 1.292 and add 0.630. For **all other classes of wheat**, multiply pounds per bushel by 1.292 and add 1.419.

**Heat-damaged kernels** are kernels, pieces of wheat kernels, and other grains which have been materially discolored and damaged by heat.

**Damaged kernels (total)** are kernels, pieces of wheat kernels, and other grains that are badly ground-damaged, badly weather-damaged, diseased, frost-damaged, heat-damaged, insect bored, mold-damaged, sprout-damaged, or otherwise materially damaged.

**Foreign material** is all matter other than wheat which remains in a sample after removal of dockage and shrunken and broken kernels.

**Shrunken and broken kernels** are kernels, kernel pieces, and other matter that pass through a 0.064-by 3/8-inch oblong-hole sieve.

**Total defects** are the sum of three factors: damaged kernels (total), shrunken and broken kernels, and foreign material. In the factor summary tables, the average values listed for total defects may not equal the sum of the component factor averages due to rounding.

**Dockage** includes all matter other than wheat that can be removed from the original sample by use of an approved device. The percentage of dockage in a sample does not affect the numerical grade.

**Moisture** is the water content of grain as determined by an approved electronic moisture meter. The percentage of moisture in a sample does not affect the numerical grade.

**Contrasting classes** include:

- \* Durum, Hard White, Soft White, and Unclassed wheats in the classes Hard Red Spring and Hard Red Winter wheats.
- \* Hard Red Spring, Hard Red Winter, Hard White, Soft Red Winter, Soft White, and Unclassed wheats in the class Durum wheat.
- \* Durum and Unclassed wheats in the class Soft Red Winter wheat.
- \* Durum, Hard Red Spring, Hard Red Winter, Soft Red Winter and Unclassed wheats in the classes Hard White wheat and Soft White wheat.

**Wheat of other classes** is any class that is mixed with the predominant class.

**Protein** is the protein content of grain as determined by an approved near infrared transmittance (NIRT) instrument calibrated against a Combustion Nitrogen Analyzer, or CNA (percent nitrogen multiplied by 5.7). The percentage of protein in a sample does not affect the numerical grade. Protein is certified on a 12 percent moisture basis.

**Mixed wheat** is a combination of classes of wheat which does not meet the minimum requirements of a specific class.

**Table 1. U.S. Wheat Exports: Number of lots and quantity exported by class and grade, 1997-99**

Class	Grade	1997		1998		1999	
		Number of Lots	Metric Tons	Number of Lots	Metric Tons	Number of Lots	Metric Tons
<b>Hard Red Winter Wheat</b>	<b>U.S. No. 1</b>	94	698,758	96	740,407	98	806,112
	<b>U.S. No. 2</b>	456	7,491,369	584	10,087,577	732	12,841,831
	<b>U.S. No. 3</b>	--	--	--	--	1	20,600
	<b>U.S. No. 4</b>	1	486	--	--	--	--
	<b>All lots</b>	557	8,190,613	679	10,820,424	831	13,668,543
<b>Hard Red Spring Wheat</b>	<b>U.S. No. 1</b>	130	1,255,900	153	1,468,682	150	1,408,049
	<b>U.S. No. 2</b>	547	5,502,004	525	5,220,911	510	4,859,753
	<b>U.S. No. 3</b>	3	26,841	1	3,777	--	--
	<b>U.S. No. 4</b>	1	1,157	--	--	--	--
	<b>All lots</b>	681	6,785,902	679	6,693,370	660	6,267,802
<b>Soft Red Winter Wheat</b>	<b>U.S. No. 1</b>	--	--	1	495	1	5,500
	<b>U.S. No. 2</b>	243	4,016,074	240	2,374,594	328	4,105,972
	<b>U.S. No. 3</b>	10	57,553	7	74,953	6	39,974
	<b>U.S. No. 4</b>	--	--	--	--	1	54,602
	<b>All lots</b>	253	4,073,627	248	2,450,042	336	4,206,048
<b>Durum Wheat</b>	<b>U.S. No. 1</b>	33	268,892	35	379,563	35	377,822
	<b>U.S. No. 2</b>	73	512,152	53	299,814	69	599,702
	<b>U.S. No. 3</b>	30	444,681	13	197,211	7	49,455
	<b>U.S. No. 4</b>	--	--	2	959	--	--
	<b>U.S. Sample Grade</b>	--	--	--	--	1	20,528
	<b>All lots</b>	136	1,225,725	103	877,547	113	1,051,083
<b>Soft White Wheat</b>	<b>U.S. No. 1</b>	159	719,613	141	728,428	131	697,870
	<b>U.S. No. 2</b>	288	5,259,826	248	5,034,472	226	3,810,860
	<b>All lots</b>	446	5,976,579	389	5,762,900	357	4,508,730
<b>Hard White Wheat</b>	<b>U.S. No. 2</b>	--	--	3	15,775	1	14,000
	<b>All lots</b>	--	--	3	15,775	1	14,000
<b>Mixed Wheat</b>	<b>U.S. No. 2</b>	3	34,151	--	--	--	--
	<b>All lots</b>	3	34,151	--	--	--	--
<b>All Classes</b>	<b>U.S. No. 1</b>	416	2,959,098	426	3,317,575	415	3,295,353
	<b>U.S. No. 2</b>	1,610	22,815,576	1,653	23,033,143	1,866	26,232,118
	<b>U.S. No. 3</b>	43	529,075	21	275,941	14	110,029
	<b>U.S. No. 4</b>	2	1,643	2	959	1	54,602
	<b>U.S. Sample Grade</b>	--	--	--	--	1	20,528
	<b>All lots</b>	2,071	26,305,392	2,106	26,644,651	2,298	29,716,206

-- = No lots reported in this category.

**Table 2. Summary of export Hard Red Winter wheat quality, 1997-99**

Factor	Grade	Grade Limit	1997				1998				1999						
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			U.S. No. 1	U.S. No. 2				U.S. No. 3	U.S. No. 4				All lots	U.S. No. 1	U.S. No. 2	U.S. No. 3	
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	60.0	94	62.3	60.4	65.4	99	62.0	60.5	63.5	98	61.6	60.4	63.6			
	<b>U.S. No. 2</b>	58.0	456	61.1	58.5	64.9	584	61.7	59.3	64.7	732	61.5	58.0	64.7			
	<b>U.S. No. 3</b>	56.0	--	--	--	--	--	--	--	--	1	61.4	61.4	61.4			
	<b>U.S. No. 4</b>	54.0	1	62.0	62.0	62.0	--	--	--	--	--	--	--	--			
	<b>All lots</b>	N/A	551	61.2	58.5	65.4	680	61.7	59.3	64.7	831	61.5	58.0	64.7			
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	94	80.2	77.8	84.2	96	79.9	77.9	81.7	98	79.3	77.8	81.9			
	<b>U.S. No. 2</b>	N/A	456	78.6	75.3	83.5	584	79.5	76.4	83.3	732	79.1	74.7	83.3			
	<b>U.S. No. 3</b>	N/A	--	--	--	--	--	--	--	--	1	79.1	79.1	79.1			
	<b>U.S. No. 4</b>	N/A	1	79.8	79.8	79.8	--	--	--	--	--	--	--	--			
	<b>All lots</b>	N/A	547	78.7	75.3	84.2	680	79.5	76.4	83.3	831	79.1	74.7	83.3			
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	94	10.7	9.0	11.9	96	10.8	9.7	12.1	98	10.8	9.6	12.3			
	<b>U.S. No. 2</b>	N/A	456	11.8	9.0	13.4	584	11.3	9.5	12.7	732	11.6	9.1	13.0			
	<b>U.S. No. 3</b>	N/A	--	--	--	--	--	--	--	--	1	10.9	10.9	10.9			
	<b>U.S. No. 4</b>	N/A	1	11.3	11.3	11.3	--	--	--	--	--	--	--	--			
	<b>All lots</b>	N/A	551	11.7	9.0	13.4	680	11.3	9.5	12.7	831	11.6	9.1	13.0			
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	94	0.0	0.0	0.0	96	0.0	0.0	0.0	98	0.0	0.0	0.1			
	<b>U.S. No. 2</b>	0.2	456	0.0	0.0	0.1	584	0.0	0.0	0.2	732	0.0	0.0	0.1			
	<b>U.S. No. 3</b>	0.5	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0			
	<b>U.S. No. 4</b>	1.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--			
	<b>All lots</b>	N/A	551	0.0	0.0	0.1	680	0.0	0.0	0.2	831	0.0	0.0	0.1			
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	94	0.1	0.0	0.6	96	0.2	0.0	1.1	98	0.3	0.0	1.1			
	<b>U.S. No. 2</b>	4.0	456	1.0	0.0	2.9	584	0.9	0.0	2.7	732	0.9	0.0	2.7			
	<b>U.S. No. 3</b>	7.0	--	--	--	--	--	--	--	--	1	0.1	0.1	0.1			
	<b>U.S. No. 4</b>	10.0	1	0.6	0.6	0.6	--	--	--	--	--	--	--	--			
	<b>All lots</b>	N/A	551	1.0	0.0	2.9	680	0.8	0.0	2.7	831	0.9	0.0	2.7			
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	94	0.2	0.0	0.4	96	0.2	0.1	0.4	98	0.2	0.0	0.4			
	<b>U.S. No. 2</b>	0.7	456	0.2	0.1	0.7	584	0.2	0.0	0.6	732	0.2	0.0	0.7			
	<b>U.S. No. 3</b>	1.3	--	--	--	--	--	--	--	--	1	0.2	0.2	0.2			
	<b>U.S. No. 4</b>	3.0	1	2.2	2.2	2.2	--	--	--	--	--	--	--	--			
	<b>All lots</b>	N/A	551	0.2	0.0	2.2	680	0.2	0.0	0.6	831	0.2	0.0	0.7			
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	94	1.7	0.3	2.5	96	1.6	0.9	2.2	98	1.7	1.1	2.5			
	<b>U.S. No. 2</b>	5.0	456	1.7	0.5	3.0	584	1.7	0.5	2.8	732	1.6	0.7	2.8			
	<b>U.S. No. 3</b>	8.0	--	--	--	--	--	--	--	--	1	1.5	1.5	1.5			
	<b>U.S. No. 4</b>	12.0	1	1.5	1.5	1.5	--	--	--	--	--	--	--	--			
	<b>All lots</b>	N/A	551	1.7	0.3	3.0	680	1.7	0.5	2.8	831	1.6	0.7	2.8			
<b>Total Defects<sup>1</sup></b>	<b>U.S. No. 1</b>	3.0	94	2.0	0.3	2.9	96	1.9	1.2	2.8	98	2.1	1.4	2.8			
	<b>U.S. No. 2</b>	5.0	456	2.9	0.7	4.9	584	2.8	1.0	4.9	732	2.7	1.1	4.5			
	<b>U.S. No. 3</b>	8.0	--	--	--	--	--	--	--	--	1	1.8	1.8	1.8			
	<b>U.S. No. 4</b>	12.0	1	4.3	4.3	4.3	--	--	--	--	--	--	--	--			
	<b>All lots</b>	N/A	551	2.9	0.3	4.9	680	2.7	1.0	4.9	831	2.7	1.1	4.5			

continued

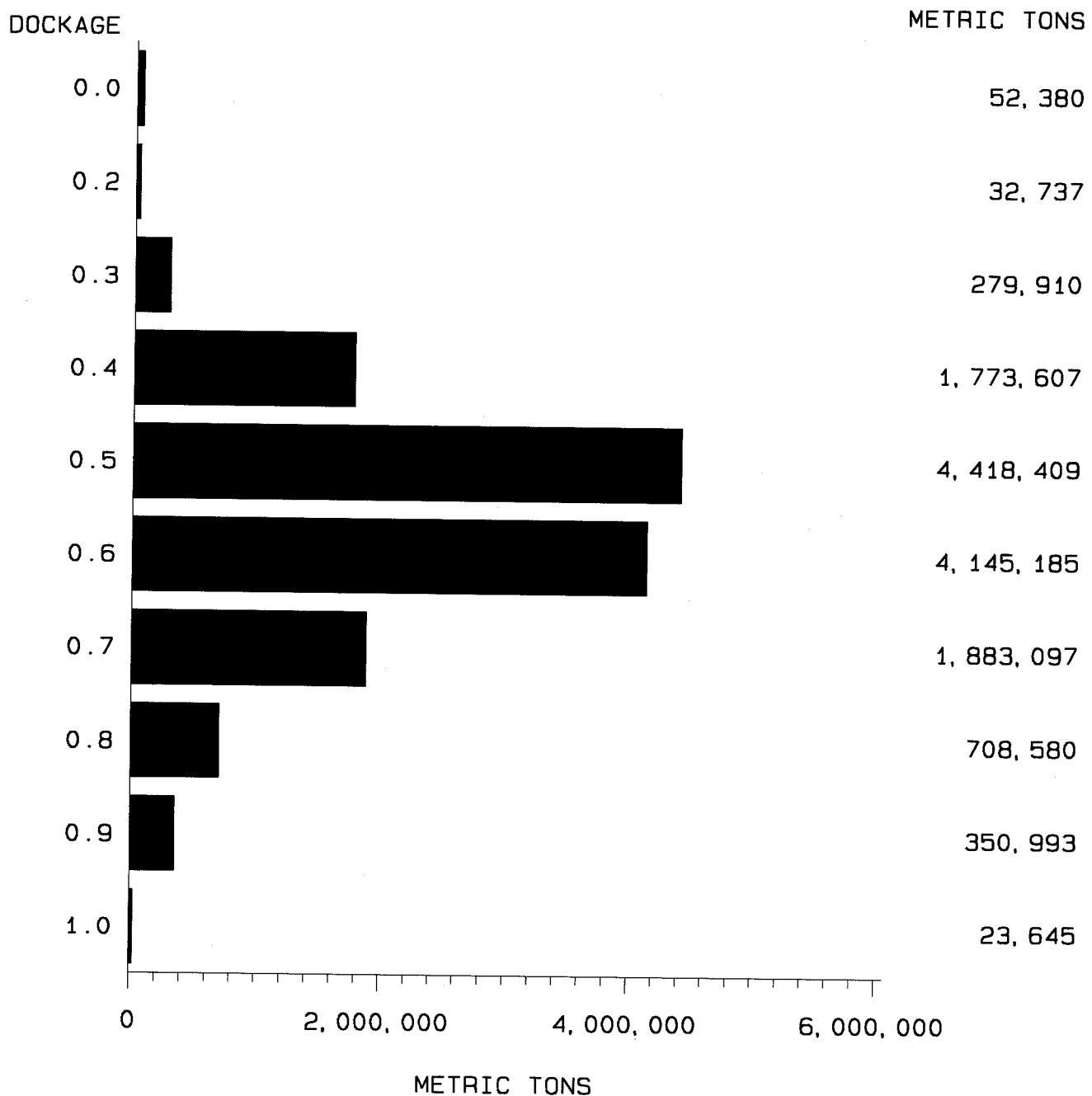
**Table 2. Summary of export Hard Red Winter wheat quality, 1997-99--Continued**

Factor	Grade	Grade Limit	1997				1998				1999			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots	
			No. of	Avg.				No. of	Avg.				Avg.	Low
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	94	0.5	0.3	0.7	96	0.5	0.2	0.7	98	0.5	0.2	0.9
	<b>U.S. No. 2</b>	N/A	456	0.6	0.2	1.2	584	0.6	0.0	1.6	732	0.6	0.0	1.0
	<b>U.S. No. 3</b>	N/A	--	--	--	--	--	--	--	--	1	0.4	0.4	0.4
	<b>U.S. No. 4</b>	N/A	1	0.5	0.5	0.5	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	551	0.6	0.2	1.2	680	0.6	0.0	1.6	831	0.6	0.0	1.0
<b>Wheat of Other Classes</b>	<b>U.S. No. 1</b>	3.0	94	1.1	0.0	3.0	96	0.6	0.0	2.4	98	0.7	0.0	2.7
	<b>U.S. No. 2</b>	5.0	456	1.8	0.0	4.9	584	1.4	0.0	4.9	732	1.5	0.0	4.6
	<b>U.S. No. 3</b>	10.0	--	--	--	--	--	--	--	--	1	1.2	1.2	1.2
	<b>U.S. No. 4</b>	10.0	1	0.6	0.6	0.6	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	551	1.8	0.0	4.9	680	1.4	0.0	4.9	831	1.4	0.0	4.6
<b>Contrasting Classes</b>	<b>U.S. No. 1</b>	1.0	94	0.3	0.0	1.0	96	0.3	0.0	1.0	98	0.2	0.0	0.8
	<b>U.S. No. 2</b>	2.0	456	0.1	0.0	1.5	584	0.1	0.0	1.4	732	0.1	0.0	1.6
	<b>U.S. No. 3</b>	3.0	--	--	--	--	--	--	--	--	1	0.7	0.7	0.7
	<b>U.S. No. 4</b>	10.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	551	0.1	0.0	1.5	680	0.1	0.0	1.4	831	0.1	0.0	1.6
<b>Protein (as is basis)</b>	<b>U.S. No. 1</b>	N/A	94	12.4	11.5	13.9	96	12.1	11.5	13.4	97	12.2	11.1	14.2
	<b>U.S. No. 2</b>	N/A	396	12.3	10.1	14.7	524	11.9	9.2	13.4	703	11.5	9.8	14.3
	<b>U.S. No. 3</b>	N/A	--	--	--	--	--	--	--	--	1	13.2	13.2	13.2
	<b>U.S. No. 4</b>	N/A	1	13.2	13.2	13.2	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	491	12.3	10.1	14.7	619	11.9	9.2	13.4	801	11.6	9.8	14.3
<b>Protein (12% moisture)</b>	<b>U.S. No. 1</b>	N/A	94	12.2	11.5	13.6	96	12.0	11.5	13.2	97	12.0	11.1	14.0
	<b>U.S. No. 2</b>	N/A	396	12.2	10.2	14.7	524	11.8	9.0	13.1	703	11.5	9.8	14.1
	<b>U.S. No. 3</b>	N/A	--	--	--	--	--	--	--	--	1	13.0	13.0	13.0
	<b>U.S. No. 4</b>	N/A	1	13.1	13.1	13.1	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	491	12.2	10.2	14.7	619	11.8	9.0	13.2	801	11.5	9.8	14.1

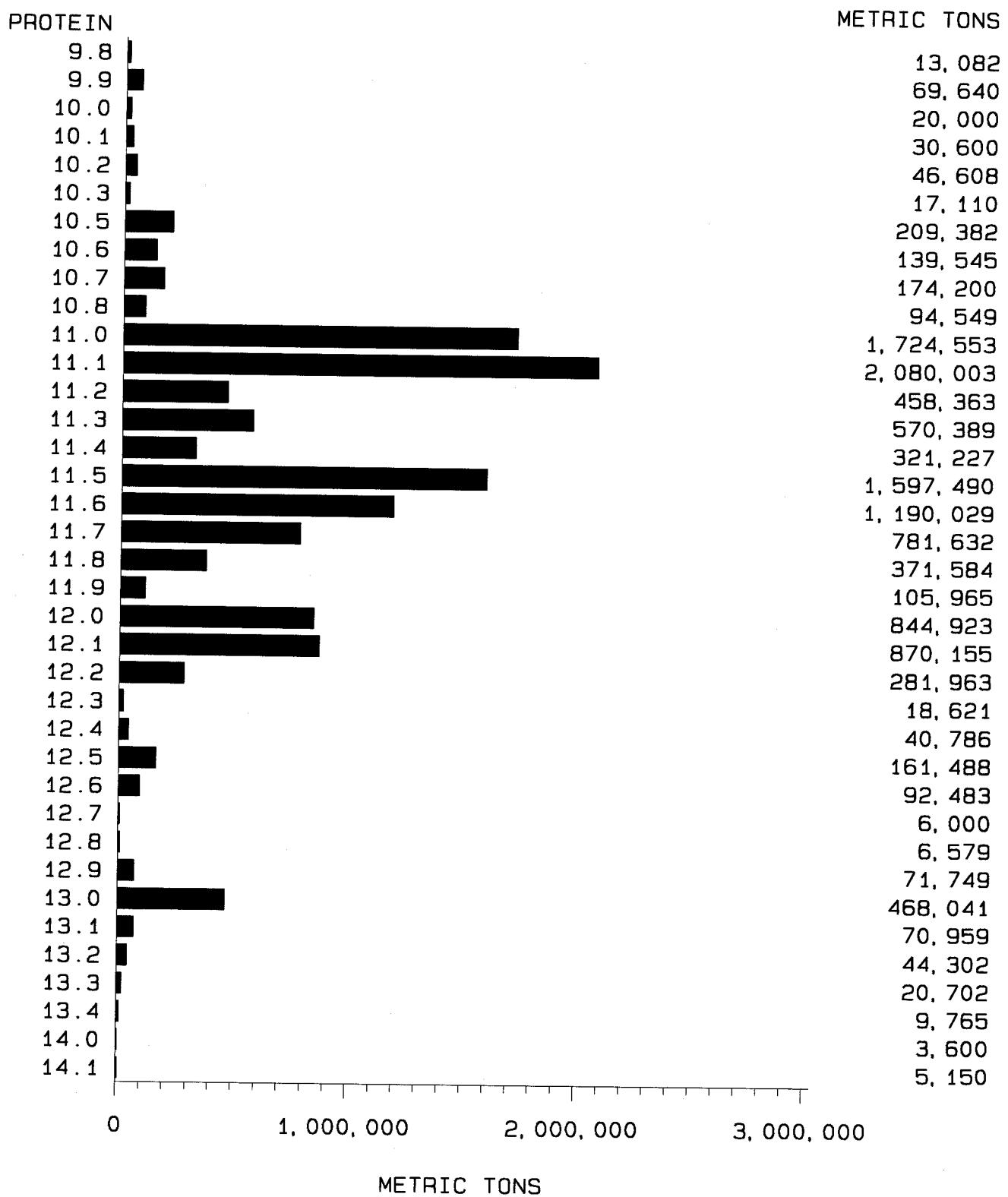
N/A=Does not apply.

--=No lots reported in this category.

**U.S. WHEAT EXPORTED, 1999**  
**DISTRIBUTION FOR DOCKAGE – ALL GRADES**  
**HARD RED WINTER**



**U.S. WHEAT EXPORTED, 1999**  
**DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES**  
**HARD RED WINTER**



**Table 3. Summary of export Hard Red Spring wheat quality, 1997-99**

Factor	Grade	Grade Limit	1997			1998			1999					
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	58.0	130	61.5	59.6	63.3	153	61.0	59.1	62.8	150	60.8	59.6	62.6
	<b>U.S. No. 2</b>	57.0	547	61.1	58.2	67.9	525	60.4	58.4	63.3	510	60.7	58.1	63.1
	<b>U.S. No. 3</b>	55.0	3	59.0	58.9	59.3	1	58.6	58.6	58.6	--	--	--	--
	<b>U.S. No. 4</b>	53.0	1	62.3	62.3	62.3	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	61.2	58.2	67.9	679	60.5	58.4	63.3	660	60.7	58.1	63.1
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	130	79.1	76.7	81.4	153	78.5	76.0	80.8	150	78.2	76.8	80.6
	<b>U.S. No. 2</b>	N/A	547	78.7	75.0	87.4	525	77.8	75.2	81.5	510	78.1	74.8	81.2
	<b>U.S. No. 3</b>	N/A	3	76.0	75.9	76.4	1	75.5	75.5	75.5	--	--	--	--
	<b>U.S. No. 4</b>	N/A	1	80.2	80.2	80.2	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	78.8	75.0	87.4	679	77.9	75.2	81.5	660	78.1	74.8	81.2
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	130	11.7	9.9	13.3	153	11.6	9.7	13.2	150	11.4	0.0	13.1
	<b>U.S. No. 2</b>	N/A	547	12.2	9.8	14.0	525	11.9	9.2	15.0	510	11.7	9.0	14.0
	<b>U.S. No. 3</b>	N/A	3	13.0	12.9	13.3	1	12.7	12.7	12.7	--	--	--	--
	<b>U.S. No. 4</b>	N/A	1	9.7	9.7	9.7	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	12.1	9.7	14.0	679	11.8	9.2	15.0	660	11.6	0.0	14.0
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	130	0.0	0.0	0.0	153	0.0	0.0	0.0	150	0.0	0.0	0.0
	<b>U.S. No. 2</b>	0.2	547	0.0	0.0	0.2	525	0.0	0.0	0.2	510	0.0	0.0	0.1
	<b>U.S. No. 3</b>	0.5	3	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--	--	--
	<b>U.S. No. 4</b>	1.0	1	0.0	0.0	0.0	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	0.0	0.0	0.2	679	0.0	0.0	0.2	660	0.0	0.0	0.1
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	130	0.6	0.0	1.6	153	0.6	0.0	1.4	150	0.5	0.0	1.5
	<b>U.S. No. 2</b>	4.0	547	1.4	0.0	3.4	525	1.3	0.0	3.3	510	0.9	0.0	2.9
	<b>U.S. No. 3</b>	7.0	3	2.6	2.3	3.3	1	3.8	3.8	3.8	--	--	--	--
	<b>U.S. No. 4</b>	10.0	1	0.1	0.1	0.1	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	1.3	0.0	3.4	679	1.2	0.0	3.8	660	0.8	0.0	2.9
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	130	0.2	0.0	0.4	153	0.2	0.0	0.4	150	0.1	0.0	0.3
	<b>U.S. No. 2</b>	0.7	547	0.2	0.0	0.6	525	0.2	0.0	0.7	510	0.2	0.0	0.7
	<b>U.S. No. 3</b>	1.3	3	0.2	0.1	0.6	1	0.5	0.5	0.5	--	--	--	--
	<b>U.S. No. 4</b>	3.0	1	0.2	0.2	0.2	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	0.2	0.0	0.6	679	0.2	0.0	0.7	660	0.2	0.0	0.7
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	130	1.6	0.7	2.3	153	1.7	0.9	2.8	150	108	0.5	2.7
	<b>U.S. No. 2</b>	5.0	547	1.5	0.3	2.7	525	1.8	0.9	3.4	510	1.9	0.8	3.2
	<b>U.S. No. 3</b>	8.0	3	1.9	1.6	2.0	1	1.7	1.7	1.7	--	--	--	--
	<b>U.S. No. 4</b>	12.0	1	1.3	1.3	1.3	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	1.6	0.3	2.7	679	1.8	0.9	3.4	660	1.9	0.5	3.2

continued

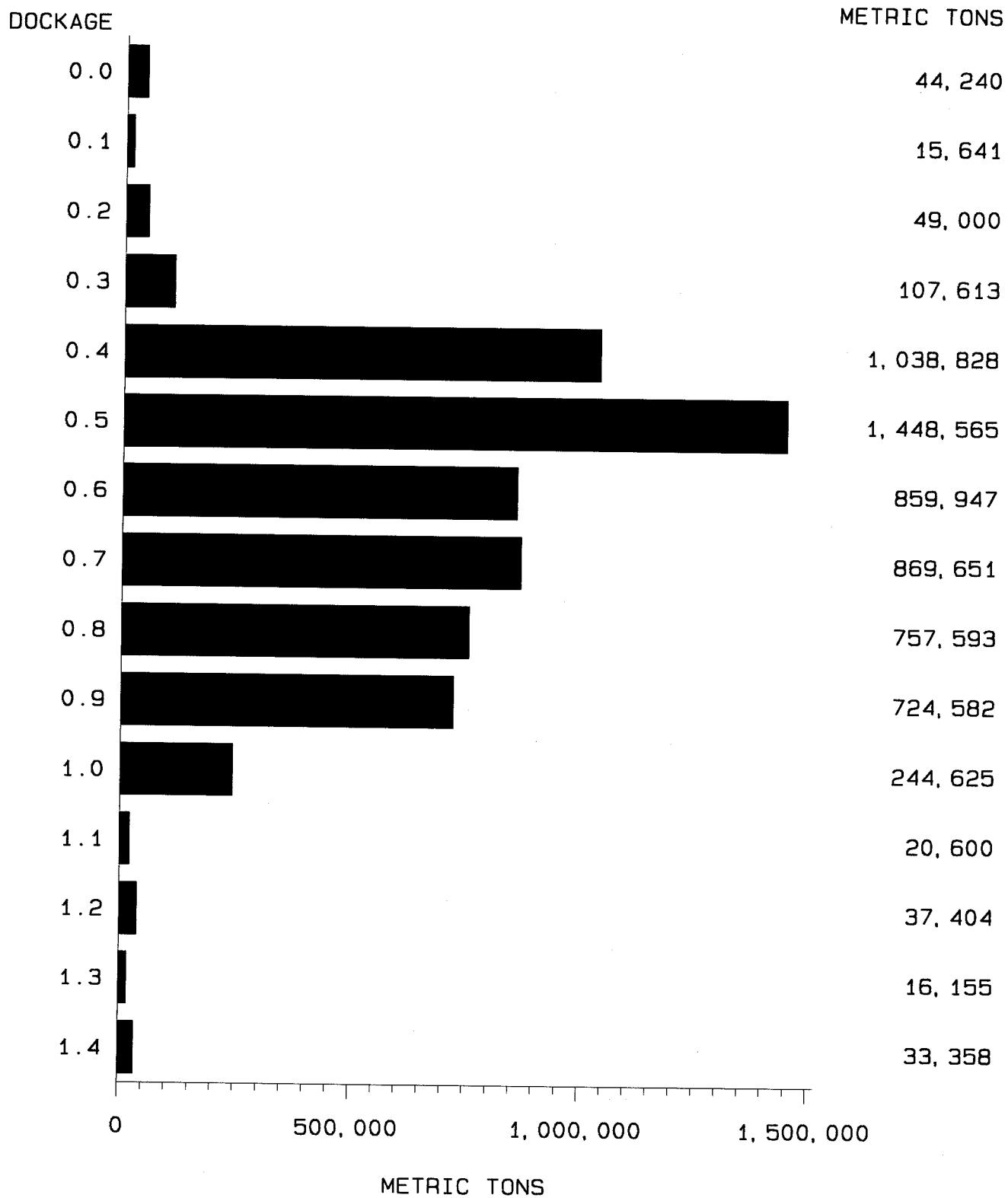
**Table 3. Summary of export Hard Red Spring wheat quality, 1997-99--Continued**

Factor	Grade	Grade Limit	1997				1998				1999			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
<b>Total Defects<sup>1</sup></b>	<b>U.S. No. 1</b>	3.0	130	2.4	1.3	3.0	153	2.5	1.4	3.0	150	2.5	0.6	3.0
	<b>U.S. No. 2</b>	5.0	547	3.2	0.6	5.0	525	3.3	1.2	5.0	510	3.0	1.0	4.9
	<b>U.S. No. 3</b>	8.0	3	4.8	4.5	5.5	1	6.0	6.0	6.0	--	--	--	--
	<b>U.S. No. 4</b>	12.0	1	1.6	1.6	1.6	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	3.0	0.6	5.5	679	3.1	1.2	6.0	660	2.9	0.6	4.9
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	130	0.6	0.3	0.8	153	0.5	0.2	0.9	150	0.5	0.0	0.8
	<b>U.S. No. 2</b>	N/A	547	0.7	0.3	1.4	525	0.7	0.0	1.3	510	0.7	0.0	1.4
	<b>U.S. No. 3</b>	N/A	3	0.9	0.8	1.2	1	0.9	0.9	0.9	--	--	--	--
	<b>U.S. No. 4</b>	N/A	1	0.6	0.6	0.6	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	0.7	0.3	1.4	679	0.6	0.0	1.3	660	0.6	0.0	1.4
<b>Wheat of Other Classes</b>	<b>U.S. No. 1</b>	3.0	130	0.5	0.0	2.1	153	0.4	0.0	2.2	150	0.5	0.0	2.7
	<b>U.S. No. 2</b>	5.0	6547	1.1	0.0	4.8	525	1.1	0.0	4.9	510	1.0	0.0	4.8
	<b>U.S. No. 3</b>	10.0	3	2.6	0.0	3.1	1	0.0	0.0	0.0	--	--	--	--
	<b>U.S. No. 4</b>	10.0	1	3.3	3.3	3.3	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	1.0	0.0	4.8	679	1.0	0.0	4.9	660	0.9	0.0	4.8
<b>Contrasting Classes</b>	<b>U.S. No. 1</b>	1.0	130	0.3	0.0	0.9	153	0.2	0.0	0.9	150	0.3	0.0	0.9
	<b>U.S. No. 2</b>	2.0	547	0.4	0.0	1.9	525	0.3	0.0	1.5	510	0.3	0.0	1.7
	<b>U.S. No. 3</b>	3.0	3	0.0	0.0	0.0	1	0.0	0.0	0.0	--	--	--	--
	<b>U.S. No. 4</b>	10.0	1	3.2	3.2	3.2	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	681	0.4	0.0	3.2	679	0.3	0.0	1.5	660	0.3	0.0	1.7
<b>Protein (as is basis)</b>	<b>U.S. No. 1</b>	N/A	130	14.4	13.6	15.3	153	14.5	13.9	15.2	150	14.5	13.9	17.3
	<b>U.S. No. 2</b>	N/A	539	14.0	13.0	15.4	519	14.1	13.0	15.5	506	14.1	4.2	15.6
	<b>U.S. No. 3</b>	N/A	3	14.2	14.0	14.4	1	14.2	14.2	14.2	--	--	--	--
	<b>U.S. No. 4</b>	N/A	1	14.2	14.2	14.2	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	673	14.1	13.0	15.4	673	14.2	13.0	15.5	656	14.2	4.2	17.3
<b>Protein (12% moisture)</b>	<b>U.S. No. 1</b>	N/A	130	14.3	13.4	15.4	153	14.4	14.0	15.3	150	14.4	14.0	15.3
	<b>U.S. No. 2</b>	N/A	539	14.1	13.0	15.2	519	14.1	13.0	15.3	506	14.1	4.2	15.3
	<b>U.S. No. 3</b>	N/A	3	14.3	14.2	14.6	1	14.3	14.3	14.3	--	--	--	--
	<b>U.S. No. 4</b>	N/A	1	13.8	13.8	13.8	--	--	--	--	--	--	--	--
	<b>All lots</b>	N/A	673	14.1	13.0	15.4	673	14.1	13.0	15.3	656	14.1	4.2	15.3

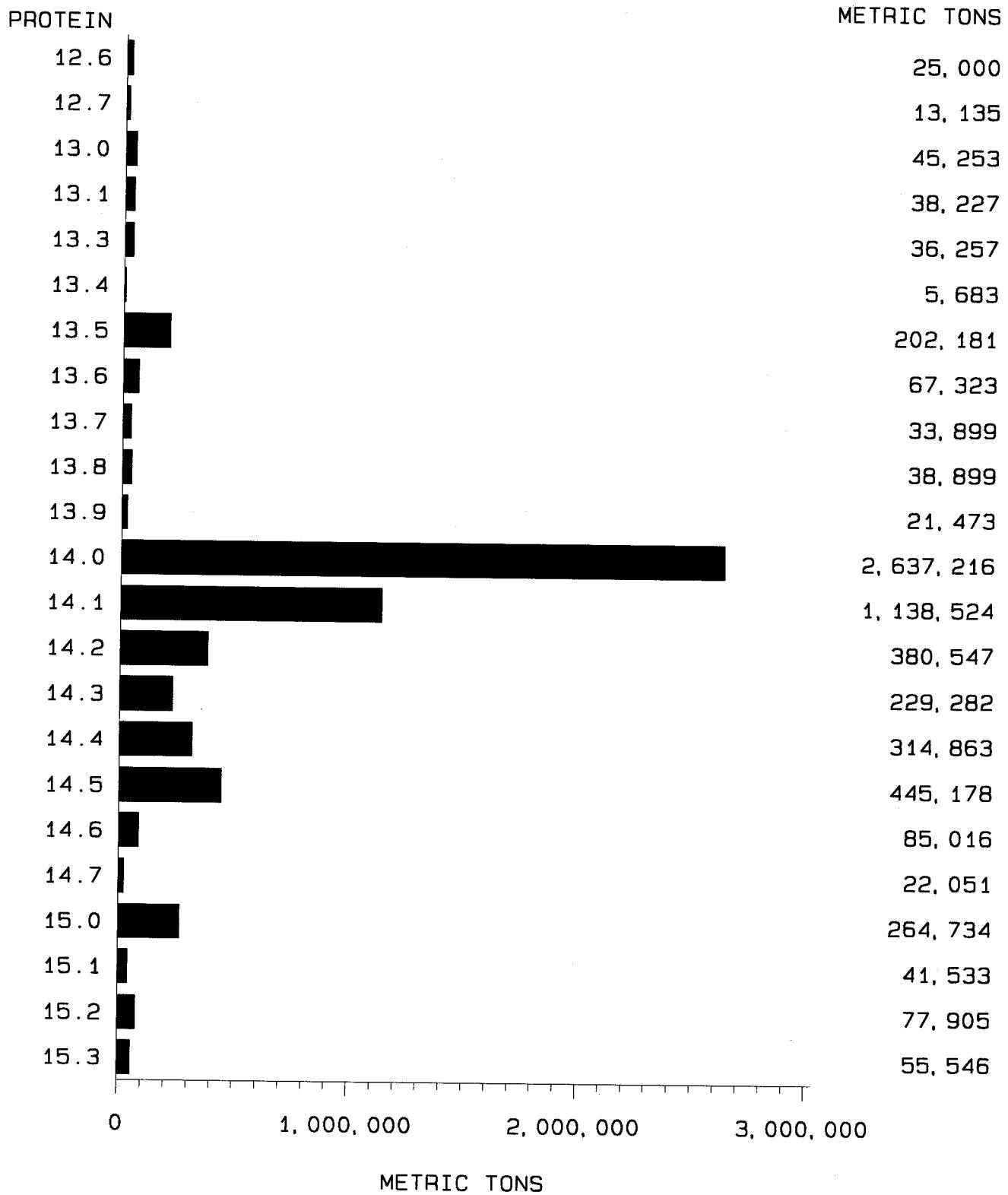
N/A = Does not apply.

<sup>1</sup>The sum of the component factor averages may not equal the average for this factor due to rounding.

**U.S. WHEAT EXPORTED, 1999**  
**DISTRIBUTION FOR DOCKAGE – ALL GRADES**  
**HARD RED SPRING**



**U.S. WHEAT EXPORTED, 1999**  
**DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES**  
**HARD RED SPRING**



**Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 1997-99**

Factor	Grade	Grade Limit	1997			1998			1999					
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	60.0	--	--	--	--	1	60.2	60.2	60.2	1	60.2	60.2	60.2
	<b>U.S. No. 2</b>	58.0	243	59.8	58.0	62.3	240	59.4	58.0	61.8	328	59.3	58.0	61.3
	<b>U.S. No. 3</b>	56.0	10	57.7	57.1	59.3	7	59.9	56.2	61.0	6	58.2	57.3	59.7
	<b>U.S. No. 4</b>	54.0	--	--	--	--	--	--	--	--	1	59.2	59.2	59.2
	<b>All lots</b>	N/A	253	59.8	57.1	62.3	248	59.4	56.2	61.8	336	59.2	57.3	61.3
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	--	--	--	--	1	77.5	77.5	77.5	1	77.5	77.5	77.5
	<b>U.S. No. 2</b>	N/A	243	77.0	74.7	80.2	240	76.5	74.7	79.6	328	76.3	74.7	78.9
	<b>U.S. No. 3</b>	N/A	10	74.3	73.5	76.4	7	77.1	72.3	78.5	6	74.9	73.8	76.9
	<b>U.S. No. 4</b>	N/A	--	--	--	--	--	--	--	--	1	76.2	76.2	76.2
	<b>All lots</b>	N/A	253	76.9	73.5	80.2	248	76.5	72.3	79.6	336	76.3	73.8	78.9
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	--	--	--	--	1	13.0	13.0	13.0	1	12.4	12.4	12.4
	<b>U.S. No. 2</b>	N/A	243	13.2	11.9	14.0	240	13.0	11.1	13.4	328	12.8	11.8	13.8
	<b>U.S. No. 3</b>	N/A	10	13.1	12.6	13.5	7	12.8	12.0	13.3	6	12.9	12.5	13.1
	<b>U.S. No. 4</b>	N/A	--	--	--	--	--	--	--	--	1	13.0	13.0	13.0
	<b>All lots</b>	N/A	253	13.2	11.9	14.0	248	13.0	11.1	13.4	336	12.8	11.8	13.8
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	--	--	--	--	1	0.0	0.0	0.0	1	0.0	0.0	0.0
	<b>U.S. No. 2</b>	0.2	243	0.0	0.0	0.1	240	0.0	0.0	0.1	328	0.0	0.0	0.1
	<b>U.S. No. 3</b>	0.5	10	0.0	0.0	0.0	7	0.0	0.0	0.0	6	0.0	0.0	0.0
	<b>U.S. No. 4</b>	1.0	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	<b>All lots</b>	N/A	253	0.0	0.0	0.1	248	0.0	0.0	0.1	336	0.0	0.0	0.1
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	--	--	--	--	1	1.1	1.1	1.1	1	0.7	0.7	0.7
	<b>U.S. No. 2</b>	4.0	243	1.4	0.4	3.9	240	1.6	0.2	3.5	328	1.6	0.2	4.0
	<b>U.S. No. 3</b>	7.0	10	4.0	3.1	5.1	7	1.9	0.9	6.0	6	3.1	0.9	5.0
	<b>U.S. No. 4</b>	10.0	--	--	--	--	--	--	--	--	1	9.3	9.3	9.3
	<b>All lots</b>	N/A	253	1.4	0.4	5.1	248	1.7	0.2	6.0	336	1.7	0.2	9.3
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	--	--	--	--	1	0.2	0.2	0.2	1	0.1	0.1	0.1
	<b>U.S. No. 2</b>	0.7	243	0.1	0.0	0.3	240	0.2	0.0	0.7	328	0.2	0.0	0.7
	<b>U.S. No. 3</b>	1.3	10	0.2	0.1	0.4	7	0.2	0.1	0.6	6	0.2	0.1	0.3
	<b>U.S. No. 4</b>	3.0	--	--	--	--	--	--	--	--	1	0.3	0.3	0.3
	<b>All lots</b>	N/A	253	0.1	0.0	0.4	248	0.2	0.0	0.7	336	0.2	0.0	0.7
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	--	--	--	--	1	0.8	0.8	0.8	1	0.8	0.8	0.8
	<b>U.S. No. 2</b>	5.0	243	0.8	0.5	2.2	240	0.9	0.3	1.9	328	0.9	0.5	2.0
	<b>U.S. No. 3</b>	8.0	10	1.4	0.9	1.7	7	1.0	0.7	1.8	6	1.0	0.6	1.4
	<b>U.S. No. 4</b>	12.0	--	--	--	--	--	--	--	--	1	0.8	0.8	0.8
	<b>All lots</b>	N/A	253	0.8	0.5	2.2	248	0.9	0.3	1.9	336	0.9	0.5	2.0
<b>Total Defects<sup>1</sup></b>	<b>U.S. No. 1</b>	3.0	--	--	--	--	1	2.1	2.1	2.1	1	1.6	1.6	1.6
	<b>U.S. No. 2</b>	5.0	243	2.3	1.0	4.9	240	2.7	1.1	4.7	328	2.7	1.2	5.0
	<b>U.S. No. 3</b>	8.0	10	5.6	4.5	6.9	7	3.0	1.8	7.8	6	4.3	2.1	6.5
	<b>U.S. No. 4</b>	12.0	--	--	--	--	--	--	--	--	1	10.4	10.4	10.4
	<b>All lots</b>	N/A	253	2.3	1.0	6.9	248	2.7	1.1	7.8	336	2.8	1.2	10.4

continued

**Table 4. Summary of export Soft Red Winter wheat quality, factor averages by grade, 1997-99--Continued**

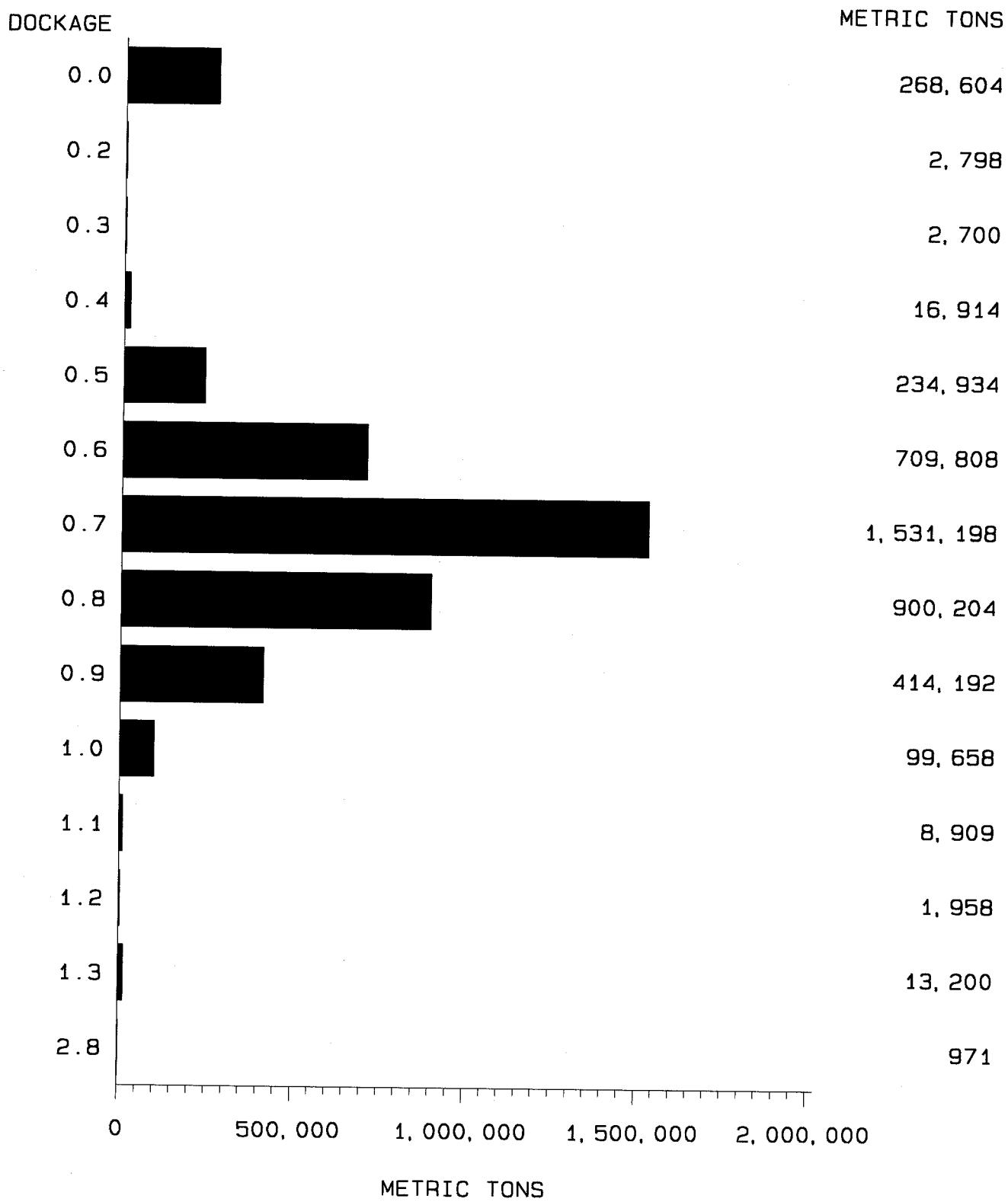
Factor	Grade	Grade Limit	1997				1998				1999			
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots	
			U.S. No. 1	N/A				243	0.7				328	0.7
Dockage	U.S. No. 2	N/A	243	0.7	0.3	1.4	240	0.7	0.0	1.5	328	0.7	0.0	2.8
	U.S. No. 3	N/A	10	1.0	0.7	1.4	7	0.7	0.6	1.2	6	1.0	0.5	1.3
	U.S. No. 4	N/A	--	--	--	--	--	--	--	--	1	0.8	0.8	0.8
	All lots	N/A	253	0.7	0.3	1.4	248	0.7	0.0	1.5	336	0.7	0.0	2.8
Wheat of Other Classes	U.S. No. 1	3.0	--	--	--	--	1	0.0	0.0	0.0	1	1.7	1.7	1.7
	U.S. No. 2	5.0	240	0.4	0.0	4.5	240	0.5	0.0	5.0	328	0.4	0.0	3.7
	U.S. No. 3	10.0	10	2.1	0.0	5.0	7	0.4	0.0	6.8	6	0.3	0.0	1.2
	U.S. No. 4	10.0	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	All lots	N/A	250	0.4	0.0	5.0	248	0.5	0.0	6.8	336	0.4	0.0	3.7
Contrasting Classes	U.S. No. 1	1.0	--	--	--	--	1	0.0	0.0	0.0	1	0.0	0.0	0.0
	U.S. No. 2	2.0	240	0.0	0.0	0.8	240	0.0	0.0	1.0	328	0.0	0.0	1.1
	U.S. No. 3	3.0	10	0.0	0.0	0.0	7	0.0	0.0	0.0	6	0.0	0.0	0.0
	U.S. No. 4	10.0	--	--	--	--	--	--	--	--	1	0.0	0.0	0.0
	All lots	N/A	250	0.0	0.0	0.8	248	0.0	0.0	1.0	336	0.0	0.0	1.1
Protein (as is basis)	U.S. No. 1	N/A	--	--	--	--	1	10.0	10.0	10.0	1	9.7	9.7	9.7
	U.S. No. 2	N/A	130	9.8	9.0	12.7	173	9.9	9.0	12.7	219	10.0	9.2	12.9
	U.S. No. 3	N/A	9	10.7	10.5	10.9	5	10.5	9.5	10.7	5	10.0	9.7	10.4
	All lots	N/A	139	9.8	9.0	12.7	179	9.9	9.0	12.7	225	10.0	9.2	12.9
Protein (12% moisture)	U.S. No. 1	N/A	--	--	--	--	1	10.1	10.1	10.1	1	9.7	9.7	9.7
	U.S. No. 2	N/A	130	9.9	9.1	12.7	173	10.0	9.1	12.8	219	10.1	9.2	13.0
	U.S. No. 3	N/A	9	10.8	10.6	11.0	5	10.6	9.5	10.8	5	10.1	9.8	10.5
	All lots	N/A	139	9.9	9.1	12.7	179	10.0	9.1	12.8	225	10.1	9.2	13.0

<sup>1</sup> The sum of the component factor averages may not equal the average for this factor due to rounding.

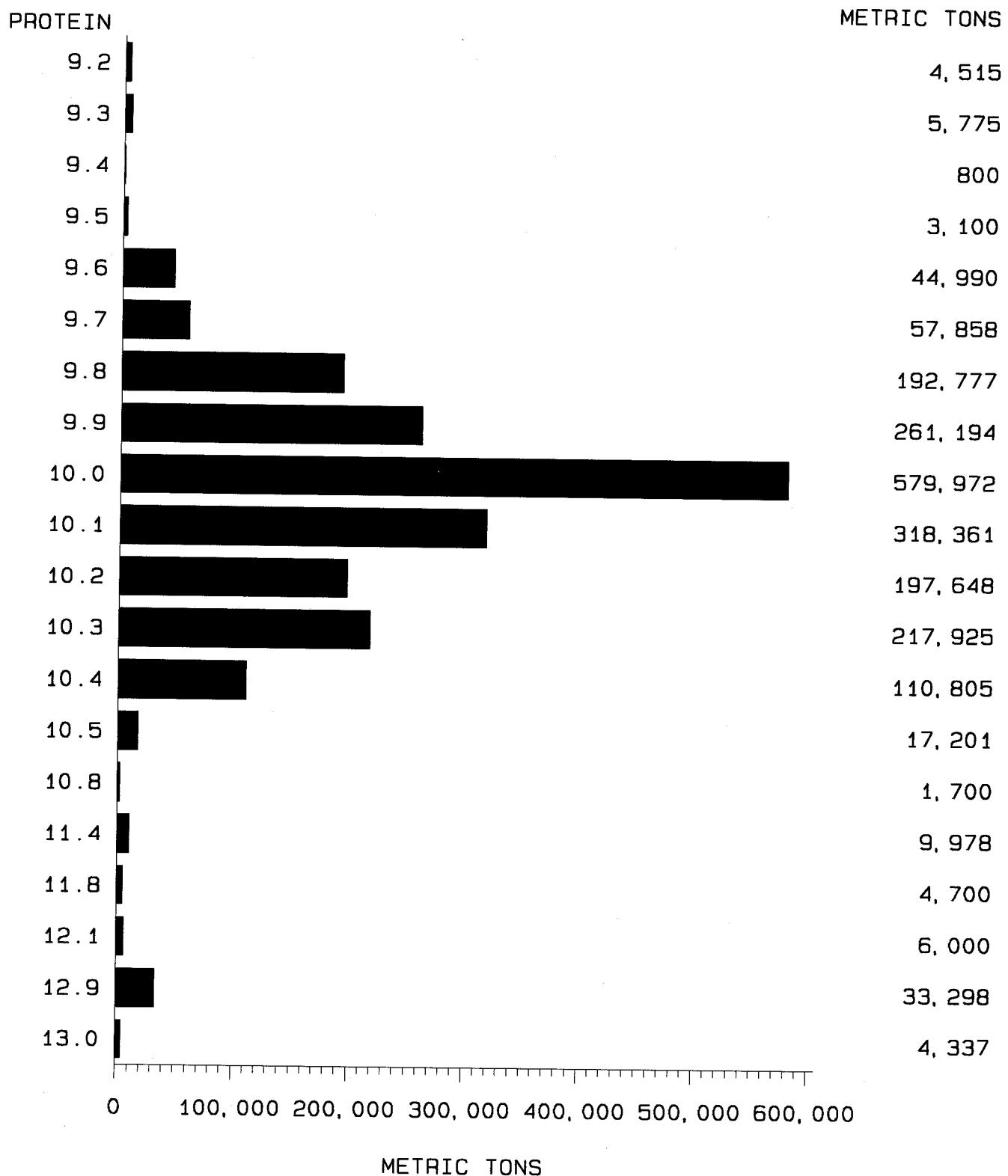
N/A = Does not apply.

-- = No lots reported in this category.

**U.S. WHEAT EXPORTED, 1999**  
**DISTRIBUTION FOR DOCKAGE – ALL GRADES**  
**SOFT RED WINTER**



**U.S. WHEAT EXPORTED, 1999**  
**DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES**  
**SOFT RED WINTER**



**Table 5. Summary of export Durum wheat quality, factor averages by grade, 1997-99**

Factor	Grade	Grade Limit	1997				1998				1999						
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			U.S. No. 1	U.S. No. 2				U.S. No. 3	U.S. No. 4				U.S. Sample	All lots			
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	60.0	33	62.4	61.0	64.4	35	61.9	60.0	63.9	35	62.2	60.0	63.7			
	<b>U.S. No. 2</b>	58.0	73	60.3	58.4	62.5	53	60.0	59.0	61.5	69	60.6	59.4	63.2			
	<b>U.S. No. 3</b>	56.0	30	59.0	58.0	60.9	13	59.3	58.9	60.3	7	59.9	59.0	60.7			
	<b>U.S. No. 4</b>	54.0	--	--	--	--	2	60.1	60.0	60.1	--	--	--	--			
	<b>U.S. Sample</b>	Grade	N/A	--	--	--	--	--	--	--	1	58.9	58.9	58.9			
	<b>All lots</b>	N/A	136	60.3	58.0	64.4	103	60.7	58.9	63.9	112	61.1	58.9	63.7			
	<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	33	80.3	78.5	82.9	35	79.7	77.2	82.2	35	80.1	77.3	82.0		
	<b>U.S. No. 2</b>	N/A	73	77.6	75.1	80.5	53	77.3	75.9	79.3	69	78.0	76.4	81.4			
	<b>U.S. No. 3</b>	N/A	30	75.9	74.7	78.3	13	76.4	75.8	77.7	7	77.1	76.0	78.2			
	<b>U.S. No. 4</b>	N/A	--	--	--	--	2	77.3	77.2	77.4	--	--	--	--			
<b>Moisture</b>	<b>U.S. Sample</b>	Grade	N/A	--	--	--	--	--	--	--	1	75.8	75.8	75.8			
	<b>All lots</b>	N/A	136	77.6	74.7	82.9	103	78.1	75.8	82.2	112	78.7	75.8	82.0			
	<b>U.S. No. 1</b>	N/A	33	8.1	7.1	12.9	35	9.3	7.2	12.3	35	8.8	6.9	12.4			
	<b>U.S. No. 2</b>	N/A	73	12.6	7.5	13.8	53	12.2	11.3	12.9	69	11.8	7.3	13.0			
	<b>U.S. No. 3</b>	N/A	30	12.9	12.4	13.5	13	12.5	11.7	12.9	7	12.4	11.8	12.7			
	<b>U.S. No. 4</b>	N/A	--	--	--	--	2	12.1	11.9	12.5	--	--	--	--			
	<b>U.S. Sample</b>	Grade	N/A	--	--	--	--	--	--	--	1	12.8	12.8	12.8			
	<b>All lots</b>	N/A	136	11.7	7.1	13.8	103	11.0	7.2	12.9	112	10.8	6.9	13.0			
	<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	33	0.0	0.0	0.0	35	0.0	0.0	0.0	35	0.0	0.0	0.1		
	<b>U.S. No. 2</b>	0.2	73	0.0	0.0	0.1	53	0.0	0.0	0.0	69	0.0	0.0	0.0			
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 3</b>	0.5	30	0.0	0.0	0.0	13	0.0	0.0	0.0	7	0.0	0.0	0.0			
	<b>U.S. No. 4</b>	1.0	--	--	--	--	2	0.0	0.0	0.0	--	--	--	--			
	<b>U.S. Sample</b>	Grade	N/A	--	--	--	--	--	--	--	1	0.0	0.0	0.0			
	<b>All lots</b>	N/A	136	0.0	0.0	0.1	103	0.0	0.0	0.0	112	0.0	0.0	0.1			
	<b>U.S. No. 1</b>	2.0	33	0.5	0.2	1.3	35	0.6	0.0	1.2	35	1.0	0.0	1.6			
	<b>U.S. No. 2</b>	4.0	73	2.1	0.4	3.1	53	1.7	0.3	2.6	69	1.8	0.3	3.1			
	<b>U.S. No. 3</b>	7.0	30	4.0	2.9	5.0	13	3.2	2.1	4.2	7	3.8	2.0	5.3			
	<b>U.S. No. 4</b>	10.0	--	--	--	--	2	2.7	2.0	3.9	--	--	--	--			
	<b>U.S. Sample</b>	Grade	N/A	--	--	--	--	--	--	--	1	4.1	4.1	4.1			
	<b>All lots</b>	N/A	136	2.5	0.2	5.0	103	1.6	0.0	4.2	112	1.6	0.0	5.3			
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	33	0.2	0.1	0.4	35	0.2	0.1	0.3	35	0.2	0.1	0.4			
	<b>U.S. No. 2</b>	0.7	73	0.3	0.1	0.7	53	0.4	0.2	0.7	69	0.3	0.1	0.6			
	<b>U.S. No. 3</b>	1.3	30	0.6	0.3	0.8	13	0.6	0.3	0.8	7	0.4	0.2	0.8			
	<b>U.S. No. 4</b>	3.0	--	--	--	--	2	0.5	0.5	0.5	--	--	--	--			
	<b>U.S. Sample</b>	Grade	N/A	--	--	--	--	--	--	--	1	0.3	0.3	0.3			
	<b>All lots</b>	N/A	136	0.4	0.1	0.8	103	0.4	0.1	0.8	112	0.3	0.1	0.8			

N/A=Does not apply.

--=No lots reported in this category.

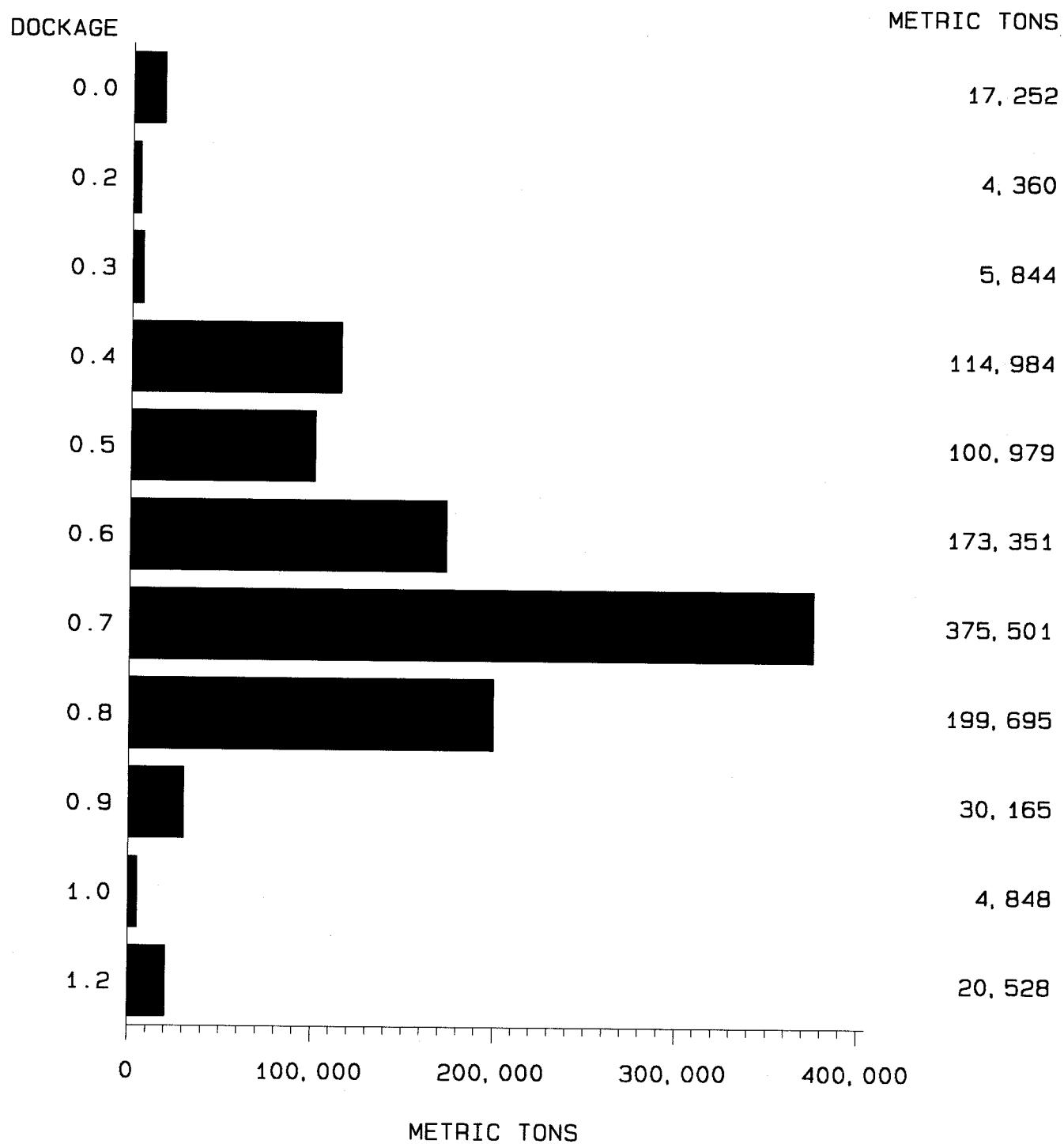
continued

**Table 5. Summary of export Durum wheat quality, factor averages by grade, 1997-99--Continued**

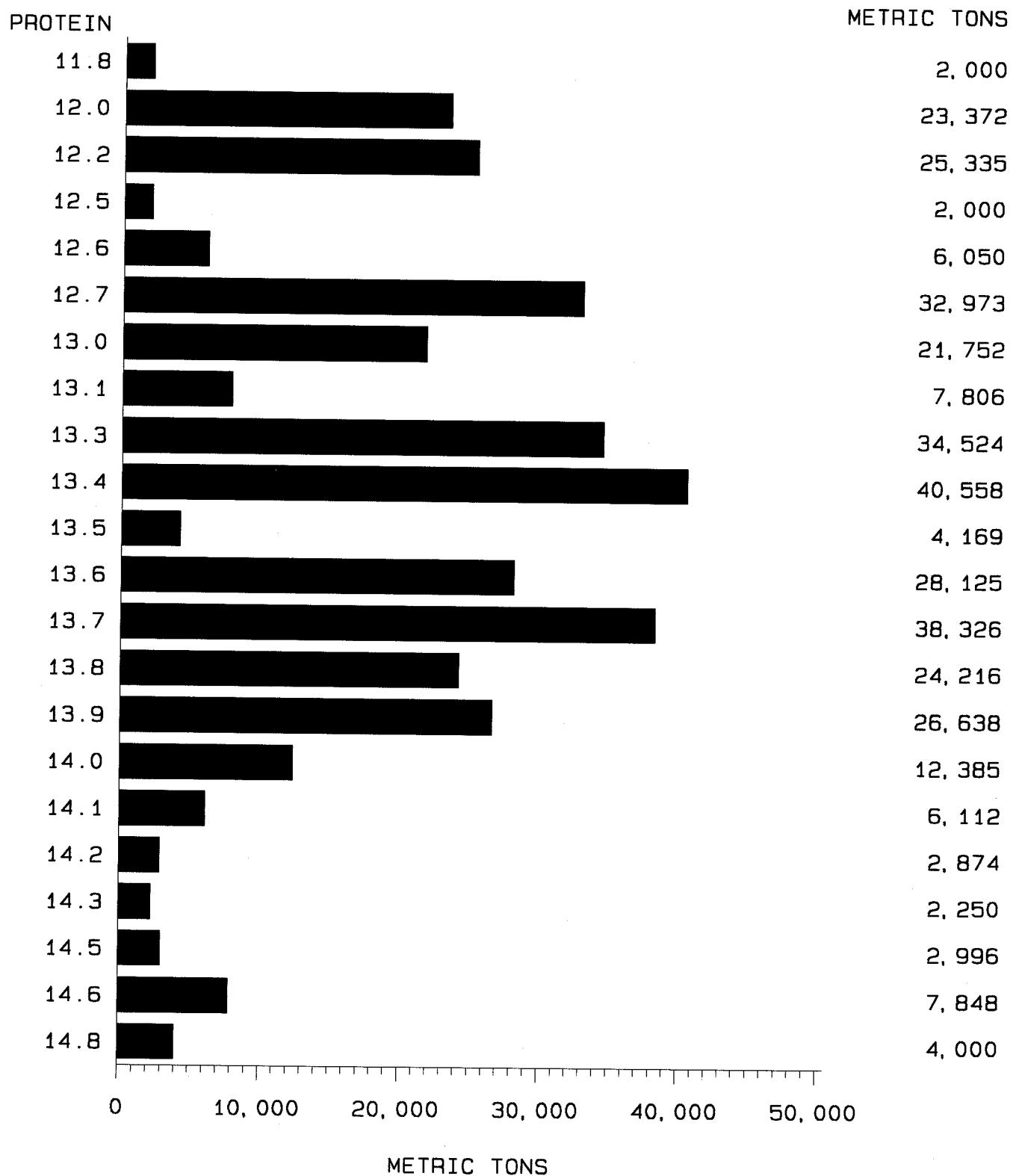
Factor	Grade	Grade Limit	1997			1998			1999			
			No. of Lots	No. of		No. of Lots	No. of		No. of Lots	No. of		
				Avg.	Low	High	Avg.	Low	High			
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	33	0.9	0.1	2.3	35	1.1	0.3	2.2	35	
	<b>U.S. No. 2</b>	5.0	73	1.8	0.5	2.3	53	2.2	1.7	2.9	69	
	<b>U.S. No. 3</b>	8.0	30	2.2	1.6	2.8	13	2.4	2.0	3.6	7	
	<b>U.S. No. 4</b>	12.0	--	--	--	--	2	1.7	1.7	1.7	--	
	<b>U.S. Sample Grade</b>	N/A	--	--	--	--	--	--	--	--	1	
	<b>All lots</b>	N/A	136	1.7	0.1	2.8	103	1.8	0.3	3.6	112	
	<b>Total Defects<sup>1</sup></b>	<b>U.S. No. 1</b>	3.0	33	1.6	0.5	2.8	35	1.9	0.9	3.0	
	<b>U.S. No. 2</b>	5.0	73	4.3	1.4	5.0	53	4.3	2.4	5.0	69	
	<b>U.S. No. 3</b>	8.0	30	6.7	5.1	7.9	13	6.2	4.8	7.6	7	
	<b>U.S. No. 4</b>	12.0	--	--	--	--	2	4.9	4.2	6.1	--	
<b>Dockage</b>	<b>U.S. Sample Grade</b>	N/A	--	--	--	--	--	--	--	--	1	
	<b>All lots</b>	N/A	136	4.6	0.5	7.9	103	3.7	0.9	7.6	112	
	<b>U.S. No. 1</b>	N/A	33	0.7	0.2	1.1	35	0.6	0.3	0.9	35	
	<b>U.S. No. 2</b>	N/A	73	0.7	0.2	1.2	53	0.7	0.0	1.0	69	
	<b>U.S. No. 3</b>	N/A	30	0.8	0.5	1.1	13	0.7	0.5	0.9	7	
	<b>U.S. No. 4</b>	N/A	--	--	--	--	2	0.6	0.6	0.7	--	
	<b>U.S. Sample Grade</b>	N/A	--	--	--	--	--	--	--	--	1	
	<b>All lots</b>	N/A	136	0.8	0.2	1.2	103	0.7	0.0	1.0	112	
	<b>Contrasting Classes</b>	<b>U.S. No. 1</b>	1.0	33	0.1	0.0	0.9	35	0.3	0.0	1.0	35
	<b>U.S. No. 2</b>	2.0	73	1.0	0.0	2.0	53	1.1	0.1	2.0	69	
<b>Protein (as is basis)</b>	<b>U.S. No. 3</b>	3.0	30	1.4	0.7	2.5	13	1.8	0.7	2.7	7	
	<b>U.S. No. 4</b>	10.0	--	--	--	--	2	3.7	3.2	4.7	--	
	<b>U.S. Sample Grade</b>	N/A	--	--	--	--	--	--	--	--	1	
	<b>All lots</b>	N/A	136	0.9	0.0	2.5	103	0.9	0.0	4.7	112	
	<b>U.S. No. 1</b>	N/A	17	14.6	12.4	15.6	23	14.2	12.7	15.7	23	
	<b>U.S. No. 2</b>	N/A	23	13.4	12.6	14.1	22	14.0	13.3	14.3	21	
	<b>U.S. No. 3</b>	N/A	2	13.5	13.4	13.6	1	14.4	14.4	14.4	--	
	<b>U.S. No. 4</b>	N/A	--	--	--	--	2	14.2	14.2	14.2	--	
	<b>U.S. Sample Grade</b>	N/A	--	--	--	--	--	--	--	--	--	
	<b>All lots</b>	N/A	42	13.9	12.4	15.6	48	14.1	12.7	15.7	44	
<b>Protein (12% moisture)</b>	<b>U.S. No. 1</b>	N/A	17	14.0	12.0	14.8	23	13.8	12.1	15.0	23	
	<b>U.S. No. 2</b>	N/A	23	13.6	12.6	14.2	22	14.0	13.3	14.2	21	
	<b>U.S. No. 3</b>	N/A	2	13.6	13.5	13.7	1	14.5	14.5	14.5	--	
	<b>U.S. No. 4</b>	N/A	--	--	--	--	2	14.2	14.2	14.3	--	
	<b>U.S. Sample Grade</b>	N/A	--	--	--	--	--	--	--	--	--	
	<b>All lots</b>	N/A	42	13.8	12.0	14.8	48	13.9	12.1	15.0	44	

<sup>1</sup> The sum of the component factor averages may not equal the average for this factor due to rounding.

**U.S. WHEAT EXPORTED, 1999**  
**DISTRIBUTION FOR DOCKAGE – ALL GRADES**  
**DURUM**



**U.S. WHEAT EXPORTED, 1999**  
**DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES**  
**DURUM**



**Table 6. Summary of export Soft White wheat quality, factor averages by grade, 1997-99**

Factor	Grade	Grade Limit	1997			1998			1999					
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 1</b>	60.0	159	61.9	60.4	63.2	141	61.5	60.2	63.3	131	61.2	60.1	62.7
	<b>U.S. No. 2</b>	58.0	288	61.5	60.0	63.2	248	61.3	59.8	62.9	226	61.1	59.8	63.1
	<b>All lots</b>	N/A	447	61.6	60.0	63.2	389	61.3	59.8	63.3	357	61.1	59.8	63.1
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 1</b>	N/A	159	79.6	77.7	81.3	141	79.2	77.6	81.5	131	78.8	77.4	80.7
	<b>U.S. No. 2</b>	N/A	288	79.2	77.2	81.3	248	78.9	77.0	81.0	226	78.6	77.0	81.2
	<b>All lots</b>	N/A	447	79.3	77.2	81.3	389	78.9	77.0	81.5	357	78.6	77.0	81.2
<b>Moisture</b>	<b>U.S. No. 1</b>	N/A	159	9.8	8.6	11.0	141	9.7	8.6	10.9	131	9.8	8.8	11.2
	<b>U.S. No. 2</b>	N/A	288	9.9	8.1	11.6	248	9.5	8.6	11.1	226	9.7	8.8	12.5
	<b>All lots</b>	N/A	447	9.9	8.1	11.6	389	9.5	8.6	11.1	357	9.8	8.8	12.5
<b>Heat-damaged Kernels</b>	<b>U.S. No. 1</b>	0.2	159	0.0	0.0	0.0	141	0.0	0.0	0.0	131	0.0	0.0	0.0
	<b>U.S. No. 2</b>	0.2	288	0.0	0.0	0.1	248	0.0	0.0	0.0	226	0.0	0.0	0.1
	<b>All lots</b>	N/A	447	0.0	0.0	0.1	389	0.0	0.0	0.0	357	0.0	0.0	0.1
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 1</b>	2.0	159	0.1	0.0	0.8	141	0.1	0.0	0.7	131	0.2	0.0	1.4
	<b>U.S. No. 2</b>	4.0	288	0.2	0.0	3.2	248	0.2	0.0	1.9	226	0.2	0.0	1.5
	<b>All lots</b>	N/A	447	0.2	0.0	3.2	389	0.2	0.0	1.9	357	0.2	0.0	1.5
<b>Foreign Material</b>	<b>U.S. No. 1</b>	0.4	159	0.1	0.0	0.4	141	0.1	0.0	0.4	131	0.1	0.0	0.4
	<b>U.S. No. 2</b>	0.7	288	0.2	0.0	0.5	248	0.2	0.0	0.5	226	0.2	0.0	0.5
	<b>All lots</b>	N/A	447	0.1	0.0	0.5	389	0.2	0.0	0.5	357	0.2	0.0	0.5
<b>Shrunken and Broken</b>	<b>U.S. No. 1</b>	3.0	159	1.0	0.5	1.9	141	0.9	0.3	1.4	131	1.0	0.6	1.5
	<b>U.S. No. 2</b>	5.0	288	1.0	0.3	2.2	248	0.9	0.6	1.4	226	1.0	0.6	1.4
	<b>All lots</b>	N/A	447	1.0	0.3	2.2	389	0.9	0.3	1.4	357	1.0	0.6	1.5
<b>Total Defects<sup>1</sup></b>	<b>U.S. No. 1</b>	3.0	159	1.2	0.6	2.1	141	1.1	0.3	2.2	131	1.4	0.6	2.4
	<b>U.S. No. 2</b>	5.0	288	1.3	0.5	4.6	248	1.2	0.8	2.8	226	1.4	0.7	2.8
	<b>All lots</b>	N/A	447	1.3	0.5	4.6	389	1.2	0.3	2.8	357	1.4	0.6	2.8
<b>Dockage</b>	<b>U.S. No. 1</b>	N/A	159	0.4	0.2	0.7	141	0.4	0.2	0.7	131	0.4	0.1	0.7
	<b>U.S. No. 2</b>	N/A	288	0.5	0.3	1.0	248	0.5	0.2	1.1	226	0.5	0.0	0.9
	<b>All lots</b>	N/A	447	0.5	0.2	1.0	389	0.5	0.2	1.1	357	0.5	0.0	0.9
<b>Wheat of Other Classes</b>	<b>U.S. No. 1</b>	3.0	159	0.3	0.0	0.9	141	0.3	0.0	0.9	131	0.3	0.0	1.0
	<b>U.S. No. 2</b>	5.0	288	0.4	0.0	1.7	248	0.3	0.0	1.7	226	0.4	0.0	1.7
	<b>All lots</b>	N/A	447	0.3	0.0	1.7	389	0.3	0.0	1.7	357	0.4	0.0	1.7
<b>Contrasting Classes</b>	<b>U.S. No. 1</b>	1.0	159	0.3	0.0	0.9	141	0.3	0.0	0.9	131	0.3	0.0	1.0
	<b>U.S. No. 2</b>	2.0	288	0.4	0.0	1.7	248	0.3	0.0	1.7	226	0.4	0.0	1.7
	<b>All lots</b>	N/A	447	0.3	0.0	1.7	389	0.3	0.0	1.7	357	0.4	0.0	1.7

continued

**Table 6. Summary of export Soft White wheat quality, factor averages by grade, 1997-99--Continued**

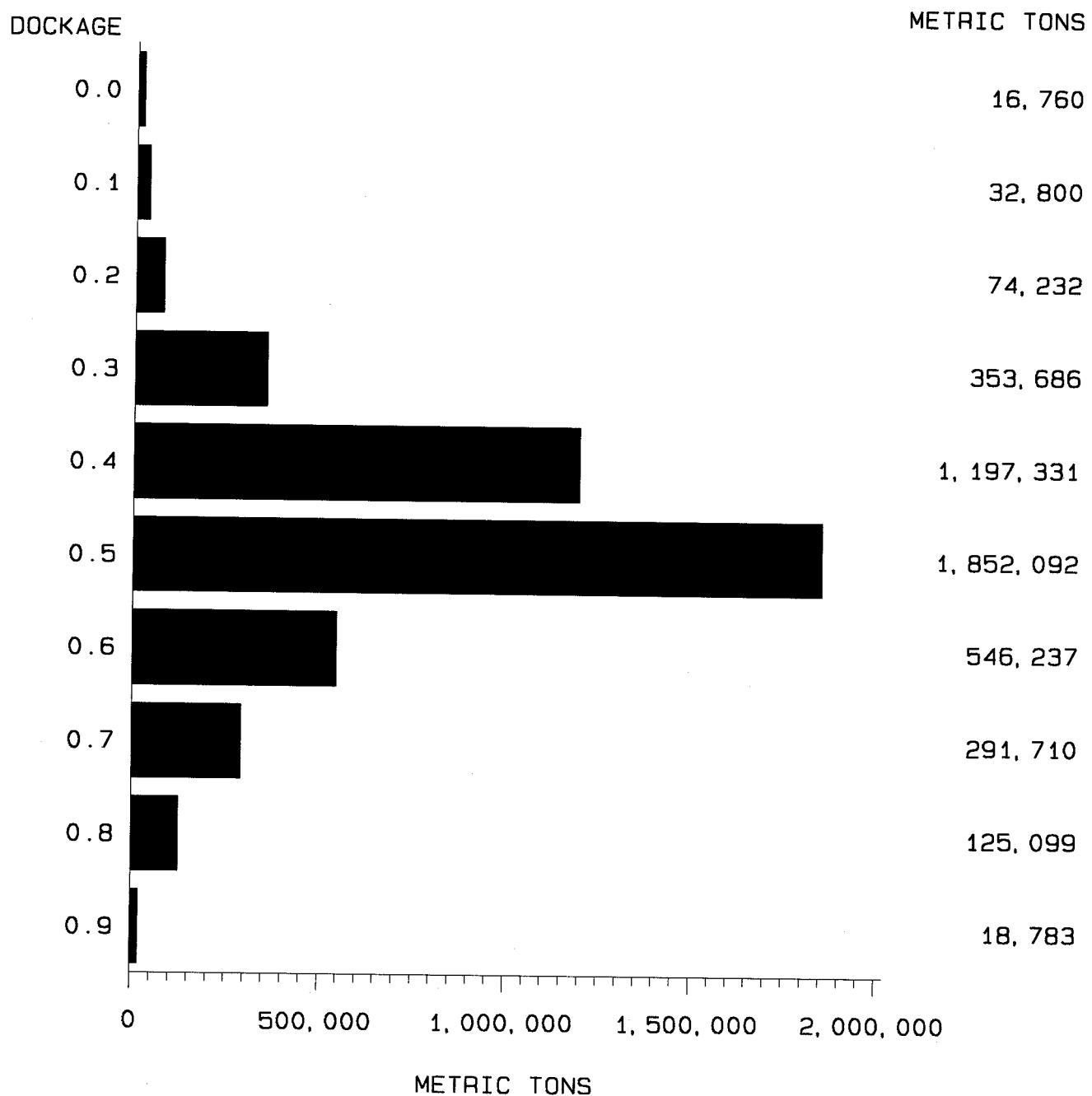
Factor	Grade	Grade Limit	1997				1998				1999						
			No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High	No. of Lots		Avg.	Low	High
			U.S. No. 1	U.S. No. 2				U.S. No. 1	U.S. No. 2				All lots	U.S. No. 1	U.S. No. 2	All lots	
<b>Protein</b> <i>(as is basis)</i>	<b>U.S. No. 1</b>	N/A	158	9.8	8.5	10.9	140	9.7	8.2	10.5	131	9.9	8.3	11.6			
	<b>U.S. No. 2</b>	N/A	180	9.8	8.9	10.6	165	9.7	8.6	10.5	181	9.8	8.3	11.1			
	<b>All lots</b>	N/A	338	9.8	8.5	10.9	305	9.7	8.2	10.5	312	9.9	8.3	11.6			
<b>Protein</b> <i>(12% moisture)</i>	<b>U.S. No. 1</b>	N/A	158	9.5	8.4	10.6	140	9.4	8.0	10.2	131	9.7	8.1	11.3			
	<b>U.S. No. 2</b>	N/A	180	9.6	8.7	10.3	165	9.5	8.4	10.2	181	9.6	8.1	10.8			
	<b>All lots</b>	N/A	338	9.6	8.4	10.6	305	9.5	8.0	10.2	312	9.6	8.1	11.3			

N/A=Does not apply.

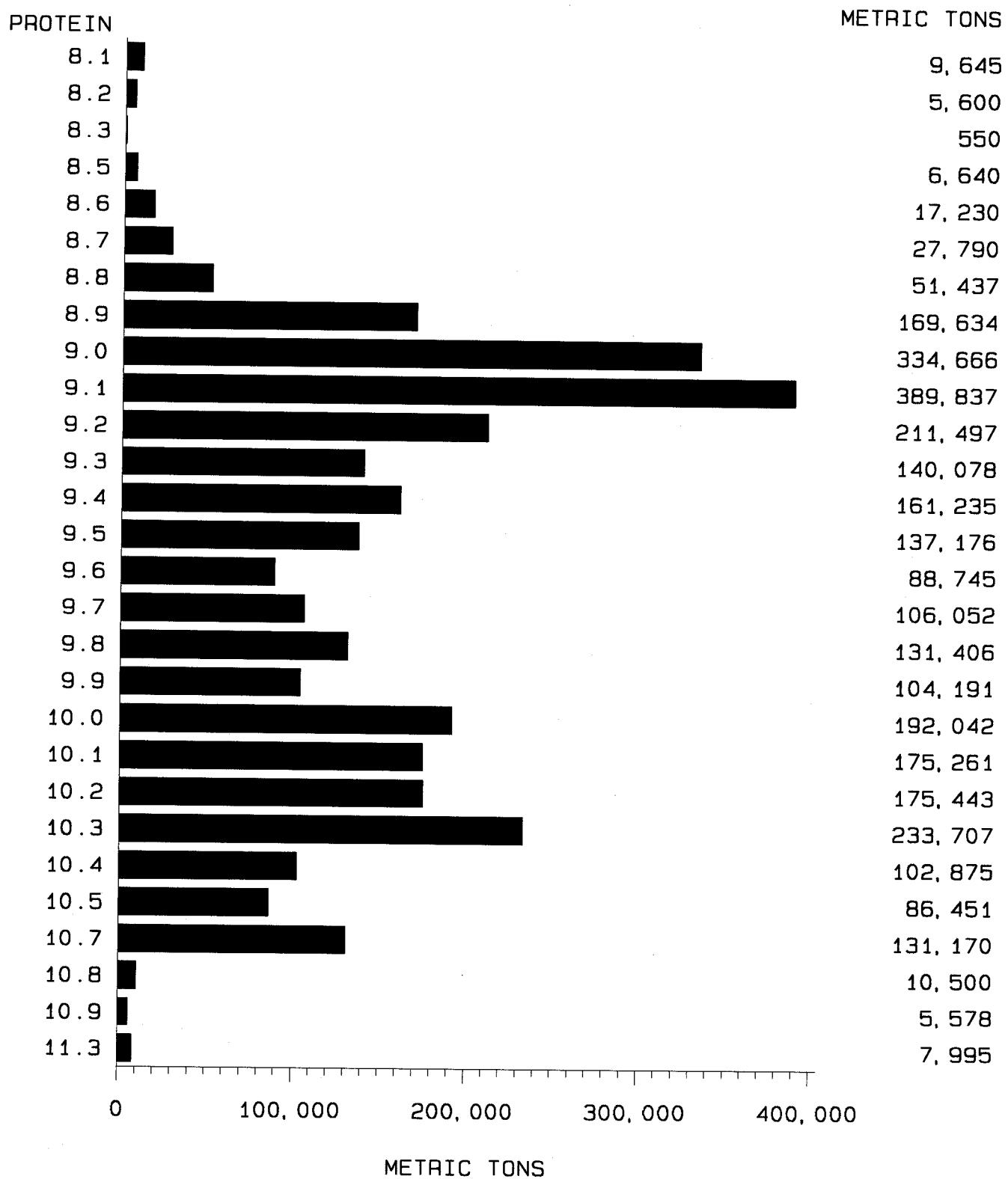
--=No lots reported in this category.

<sup>1</sup>The sum of the component factor averages may not equal the average for this factor due to rounding.

**U.S. WHEAT EXPORTED, 1999**  
**DISTRIBUTION FOR DOCKAGE – ALL GRADES**  
**SOFT WHITE WHEAT**



**U.S. WHEAT EXPORTED, 1999**  
**DISTRIBUTION FOR PROTEIN (12% M) – ALL GRADES**  
**SOFT WHITE WHEAT**



**Table 7. Summary of export Hard White wheat quality, 1997-99**

Factor	Grade	Grade Limit	1997			1998			1999			
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots	Avg.
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 2</b>	58.0	--	--	--	--	3	61.7	60.9	62.1	1	61.8
	<b>All lots</b>	N/A	--	--	--	--	3	61.7	60.9	62.1	1	61.8
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 2</b>	N/A	--	--	--	--	3	79.4	78.4	79.9	1	79.6
	<b>All lots</b>	N/A	--	--	--	--	3	79.4	78.4	79.9	1	79.6
<b>Moisture</b>	<b>U.S. No. 2</b>	N/A	--	--	--	--	3	9.6	9.3	10.3	1	10.2
	<b>All lots</b>	N/A	--	--	--	--	3	9.6	9.3	10.3	1	10.2
<b>Heat-damaged Kernels</b>	<b>U.S. No. 2</b>	0.2	--	--	--	--	3	0.0	0.0	0.0	1	0.0
	<b>All lots</b>	N/A	--	--	--	--	3	0.0	0.0	0.0	1	0.0
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 2</b>	4.0	--	--	--	--	3	0.0	0.0	0.0	1	0.2
	<b>All lots</b>	N/A	--	--	--	--	3	0.0	0.0	0.0	1	0.2
<b>Foreign Material</b>	<b>U.S. No. 2</b>	0.7	--	--	--	--	3	0.1	0.1	0.2	1	0.2
	<b>All lots</b>	N/A	--	--	--	--	3	0.1	0.1	0.2	1	0.2
<b>Shrunken and Broken</b>	<b>U.S. No. 2</b>	5.0	--	--	--	--	3	1.9	1.4	2.0	1	2.3
	<b>All lots</b>	N/A	--	--	--	--	3	1.9	1.4	2.0	1	2.3
<b>Total Defects</b>	<b>U.S. No. 2</b>	5.0	--	--	--	--	3	2.0	1.5	2.1	1	2.7
	<b>All lots</b>	N/A	--	--	--	--	3	2.0	1.5	2.1	1	2.7
<b>Dockage</b>	<b>U.S. No. 2</b>	N/A	--	--	--	--	3	1.0	0.9	1.4	1	0.6
	<b>All lots</b>	N/A	--	--	--	--	3	1.0	0.9	1.4	1	0.6
<b>Wheat of other Classes</b>	<b>U.S. No. 2</b>	5.0	--	--	--	--	3	0.8	0.4	0.9	1	1.6
	<b>All lots</b>	N/A	--	--	--	--	3	0.8	0.4	0.9	1	1.6
<b>Contrasting Classes</b>	<b>U.S. No. 2</b>	2.0	--	--	--	--	3	0.8	0.4	0.9	1	0.0
	<b>All lots</b>	N/A	--	--	--	--	3	0.8	0.4	0.9	1	0.0
<b>Protein (as is basis)</b>	<b>U.S. No. 1</b>	N/A	--	--	--	--	3	12.1	11.8	12.2	1	12.3
	<b>All lots</b>	N/A	--	--	--	--	3	12.1	11.8	12.2	1	12.3
<b>Protein (12% moisture)</b>	<b>U.S. No. 1</b>	N/A	--	--	--	--	3	11.8	11.6	11.9	1	12.1
	<b>All lots</b>	N/A	--	--	--	--	3	11.8	11.6	11.9	1	12.1

N/A=Does not apply.

--=No lots reported in this category.

**Table 8. Summary of export Mixed wheat quality, 1997-99**

Factor	Grade	Grade Limit	1997			1998			1999		
			No. of Lots	Avg.	Low	High	No. of Lots	Avg.	Low	High	No. of Lots
<b>Test Weight (lb/bu)</b>	<b>U.S. No. 2</b>	58.0	3	60.1	60.0	60.3	--	--	--	--	--
	All lots	N/A	3	60.1	60.0	60.3	--	--	--	--	--
<b>Test Weight (kg/hl)</b>	<b>U.S. No. 2</b>	N/A	3	77.4	77.2	77.6	--	--	--	--	--
	All lots	N/A	3	77.4	77.2	77.6	--	--	--	--	--
<b>Moisture</b>	<b>U.S. No. 2</b>	N/A	3	12.7	12.0	13.3	--	--	--	--	--
	All lots	N/A	3	12.7	12.0	13.3	--	--	--	--	--
<b>Heat-damaged Kernels</b>	<b>U.S. No. 2</b>	0.2	3	0.0	0.0	0.0	--	--	--	--	--
	All lots	N/A	3	0.0	0.0	0.0	--	--	--	--	--
<b>Damaged Kernels (Total)</b>	<b>U.S. No. 2</b>	4.0	3	0.9	0.9	1.6	--	--	--	--	--
	All lots	N/A	3	0.9	0.9	1.6	--	--	--	--	--
<b>Foreign Material</b>	<b>U.S. No. 2</b>	0.7	3	0.2	0.1	0.2	--	--	--	--	--
	All lots	N/A	3	0.2	0.1	0.2	--	--	--	--	--
<b>Shrunken and Broken</b>	<b>U.S. No. 2</b>	5.0	3	1.2	1.0	1.2	--	--	--	--	--
	All lots	N/A	3	1.2	1.0	1.2	--	--	--	--	--
<b>Total Defects</b>	<b>U.S. No. 2</b>	5.0	3	2.3	2.3	2.7	--	--	--	--	--
	All lots	N/A	3	2.3	2.3	2.7	--	--	--	--	--
<b>Dockage</b>	<b>U.S. No. 2</b>	N/A	3	0.8	0.6	1.1	--	--	--	--	--
	All lots	N/A	3	0.8	0.6	1.1	--	--	--	--	--
<b>Protein (as is basis)</b>	<b>U.S. No. 2</b>	N/A	--	--	--	--	--	--	--	--	--
	All lots	N/A	--	--	--	--	--	--	--	--	--
<b>Protein (12% moisture)</b>	<b>U.S. No. 2</b>	N/A	--	--	--	--	--	--	--	--	--
	All lots	N/A	--	--	--	--	--	--	--	--	--

-- = No lots reported in this category.